

Friday, February 19, 2016 10:37:26 AM

141905

Page 1

Accept

N900040100

Setup Start *NS1*

Revision ID: ~~PRELIM~~ N/C

Item Name: CLAMP HALF

Stop *NS2*

Start Date: 2/23/2016 **Start Qty:** 5.00 ***5***

Cust Item ID:

Required Date: 3/1/2016 **Req'd Qty:** 5.00 ***5***

Customer:

Reference:

Approvals: **Process Plan:**  **Date:** _____ **Tooling:** _____ **Date:** _____

Run Start *NR1*

QC: Date: SPC (Y/N): Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
606.7800	Rev N/C [Signature]
100	Cut blanks as per folio

100

Cut blanks as per folio

0.00

100

Bandsaw

Jeaspa Bandsaw

Memo

2.00" LONG

0.00

B. 16/02/24

二

9

DAS
08
9-80

110

0.00

110

HAAS 5AXIS

HAAS CNC vertical machine #5

Memo

MACHINE AS PER FOLIO FB411

FOLIO REV: AA

DWG REV: NTC

DEBURR

0.02

D. A. 16/02/25

—

DAS
08
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong				
Design ☐	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions				
Doc/Data ☐	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance				
Equip/Tooling ☐	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect				
Handling/Pre ☐	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing				
Material ☐	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved				
Internal Transport ☐	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing				
Tribal Knowledge ☐	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish				
LOA ☐	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread				
Substation ☐	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence				
Past Expiry Date ☐	☐ Manufacturing Process	OTHER : _____							
Misidentified ☐	☐ Past Due								

Work Order ID 141905

141905

Page 2

Friday, February 19, 2016 10:37:26 AM

Item ID: 606.7819 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: PRELIM Stop ***NS2***
Item Name: CLAMP HALF
Start Date: 2/23/2016 Start Qty: 5.00 ***5*** Cust Item ID:
Required Date: 3/1/2016 Req'd Qty: 5.00 ***5*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
140 *140* QC Quality Control	QC2- Inspect parts off machine FAI/FAIB Memo	0.00 0.00	B.A	16/02/25		5	0		DAS 08 9-89
150 *150* QC Quality Control	QC8- Inspect parts - second check Memo	0.00 0.00				5	0		DAS 20 9-89 16-02-26
160 *160* Packaging Packaging	Identify as per dwg & Stock Location: <u>CCK102</u> <u>51165</u> Memo	0.00 0.00				5			DAS 6 9-89 FEB 29 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QS1042) Approval Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____	
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐ _____							

Work Order ID 141905***141905***

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Friday, February 19, 2016 10:37:26 AM

Item ID: 606.7819 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: PRELIM Stop ***NS2***
Item Name: CLAMP HALF
Start Date: 2/23/2016 Start Qty: 5.00 ***5*** Cust Item ID:
Required Date: 3/1/2016 Req'd Qty: 5.00 ***5*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
170	QC21 - Final Inspection - Work Order Release	0.00							
170									
QC	Memo	0.01							
Quality Control									

MCS MAR 01 2016

MCS MAR 01 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment ☐		No Re-verification ☐		Pressure/Forced ☐		Temperature/Cure ☐	
Design ☐		Operator ☐		Bending ☐		Set-up ☐	
Doc/Data ☐		Offset/Setup ☐		Centre Not Concentric ☐		BOM/Route ☐	
Equip/Tooling ☐		Supplier ☐		Cracks ☐		Broken/Damage/Defect ☐	
Handling/Pre ☐		Training ☐		Crimp/Kink/Ripple/Wave ☐		Inspection Incomplete/Unqualified ☐	
Material ☐		Use for Testing ☐		Cuffs ☐		Contamination ☐	
Internal Transport ☐		Poor Information ☐		Crushing ☐		Countersink ☐	
Tribal Knowledge ☐		Rushing ☐		Heat Treat ☐		Cut Too Short ☐	
LOA ☐		Product Improvement ☐		Wave/Twist in Tube ☐		Instructions Incomplete/Unclear ☐	
Substation ☐		Process Improvement ☐		Marks/Chatter ☐		Drill Holes ☐	
Past Expiry Date ☐		Manufacturing Process ☐		OTHER : ☐			
Misidentified ☐		Past Due ☐					

Picklist Print

Page 1

Friday, February 19, 2016 10:37:26 AM

Work Order ID: 141905

141905

Parent Item: 606.7819

606 7819

Parent Item Name: CLAMP HALF

Start Date: 2/23/2016

Required Date: 3/1/2016

Start Qty: 5.00

Required Qty: 5.00

Comments: IPP REV:A NEW ISSUE 15.08.11 JLM VERIFIED BY:JFS

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304B1.000X1.000		Purchased			No		f	5.0550		0.873684			

M304B1 000X1 000

304 bar 1.00 x 1.00

G.A 16/02/24

Location

Loc Qty

Loc Code

MAT009

5.055

M133560

1.155



M133889

3.9

0.860 ft

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QS1042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

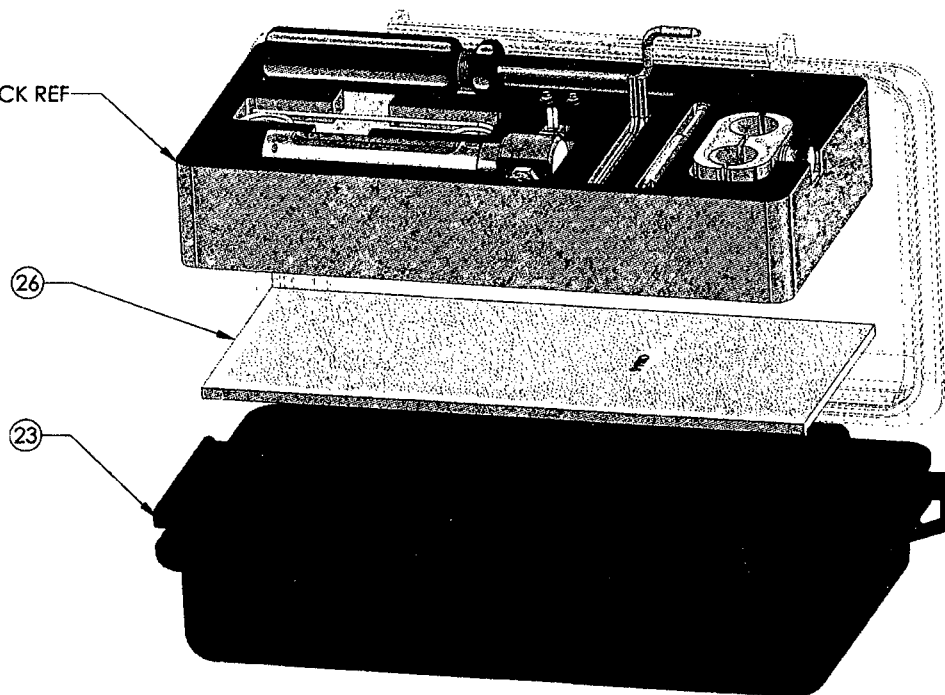
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NOTES:

1. IDENTIFY PER MPP-120.
- 2 MATERIAL: AISI TYPE 304 STAINLESS STEEL.
- 3 APPLY ANTI-SIEZE AS REQUIRED.
- 4 MATERIAL: MCMASTER CARR P/N 8860K26.
BEND 6IN WIRE INTO SPECIFIED SHAPE.
- 5 MAKE FROM P/N 601.3825 SCREW DRIVER. BEND BLADE SHAFT TO SHAPE
AND DIMENSIONS SHOWN.
- 6 MATERIAL: 600.0062 FOAM.
- 7 APPLY LABELS P/N 601.3830 & 601.3831 AS SHOWN.
- 8 FINISH IAW MPP-172:
ELECTROPOLISH PER SECTION 7.0
PASSIVATE PER SECTION 6.0

FOAM PACK REF



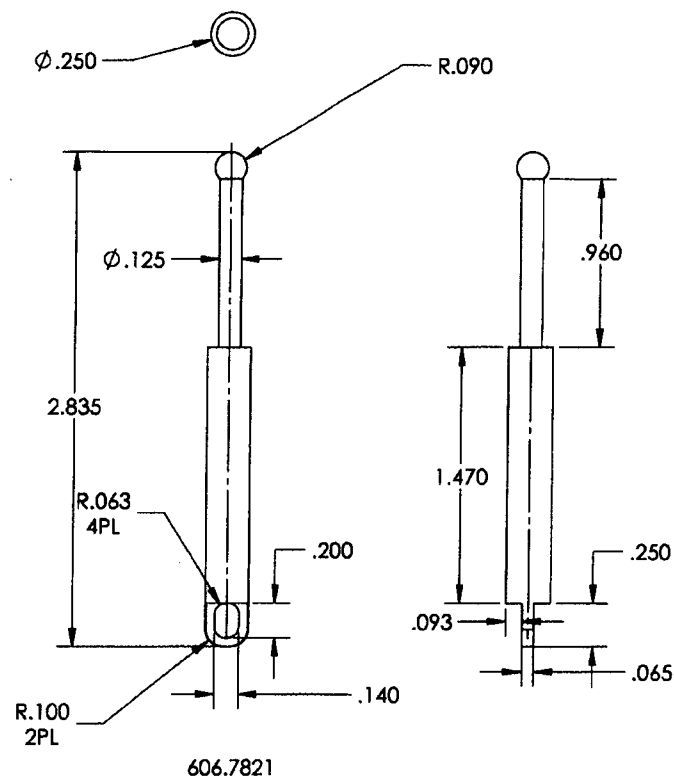
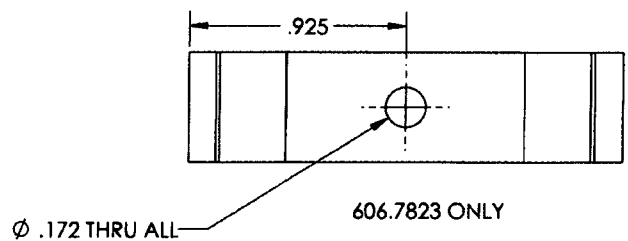
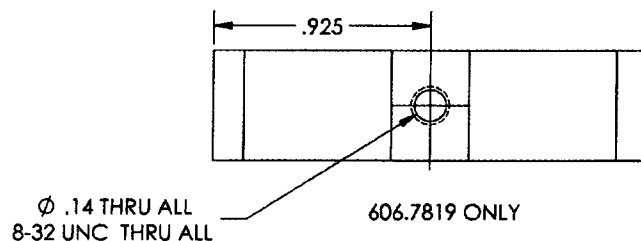
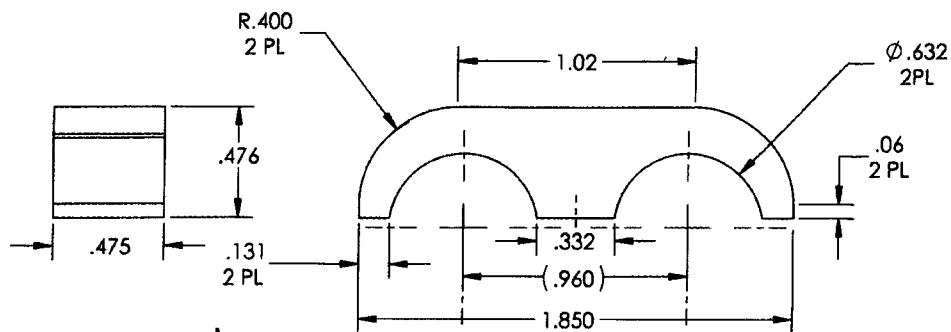
606.7803

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	LAST PROTOTYPE REVISION: PPS		NJC
N/C	INITIAL RELEASE	11-26-15	P. BRAVO

1	-	-	26	OIM-5	OPERATION INSTRUCTIONS		
1	-	-	25	601.3831	DART LOGO LABEL		
1	-	-	24	601.3830	LABEL		
1	-	-	23	601.3829	PELICAN 1060 MICRO SERIES CASE		
1	-	-	22	606.7822	FOAM	△	
1	-	-	21	606.7821	TEST PULL ROD	△△	
1	-	-	20	606.7820	RESET TOOL	△	
1	-	-	19	601.3824	HEX L-KEY 7/64"	7122A17	
1	-	-	18	601.3823	HEX L-KEY 3/32"	7122A16	
1	-	1	17	601.3822	SEALING HEX NUT	91339A120	
3	-	1	16	601.3821	SET SCREW	90291A827	
1	-	1	15	601.2591	SCREW	AN500-AD4-2	
1	-	1	14	601.3796	KEY RING		
2	-	2	13	601.2937	O-RING	AS568A-008	
1	-	1	12	606.7814	PLUNGER CAP	△△	
1	-	1	11	601.3775	SPRING		
1	-	1	10	606.7815	PLUNGER	△△	
1	-	1	9	645.6910	PULL ROD		
1	-	1	8	606.7810	PULL ROD HOUSING	△△	
1	-	1	7	645.7710	SHROUD		
1	1	-	6	601.1084	O-RING	AS568A-006	
1	1	-	5	601.3819	WASHER	92141A009	
1	1	-	4	601.3867	THUMB SCREW	99607A139	
1	1	-	3	606.7819	CLAMP LOWER HALF	△△	
1	1	-	2	606.7823	CLAMP UPPER HALF	△△	
2	-	2	1	606.7818	RETAINER WIRE	8860K26	
X				606.7803	PULL CABLE TEST KIT		
X	1			606.7802	CLAMP ASSY		
X				606.7801	PULL CABLE TEST FIXTURE		
7803,7802,7801	FIND #		PART #	DESCRIPTION		MATL	SPEC.

PARTS LIST			
QTY	DESCRIPTION	PART #	DESCRIPTION
NEXT ASSY (S)			
NONE			
ORIGINAL DATE: 11/26/15			
DRAWN BY: J. BECKER			
DRAWING APPROVAL: P. BRAVO			
CONTRACT NO.			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 3 PLACE DECIMALS: .005 AND: .03 ± .01			
DART 3030 ENTERPRISE CT., SUITE A VISTA, CA. 92081 (760)-774-5300 APCAL INDUSTRIES, INC. DBA DART AEROSPACE			
PULL CABLE TEST FIXTURE-DART VALVE			
REV. 8	CASH CODE 07M26	DWG. NO. 606.7800	REV. N/C
SCALE: NONE SHEET 1 OF 11			

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ORIGINAL DATE 11/24/15	3030 ENTERPRISE CT., SUITE A VISTA, CA 92081 (760) 724-5300
DRAWN BY J. BECKER P. BRAVO	DART AEROSPACE APICAL INDUSTRIES INC. DBA DART AEROSPACE
DRAWING APPROVAL P. BRAVO 11/24/15	PULL CABLE TEST FIXTURE-DART VALVE
CONTRACT NO.	SCALE NONE
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS $\pm .01$ 3 PLACE DECIMALS $\pm .005$ ANGLES $\pm .5^\circ$	SHEET 7 OF 11

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